

## GS I

SYLLABUS: POPULATION ISSUES.

### DEMOGRAPHIC TRANSITION

THE HINDU, PG.NO: 14.

**News:** "Why are fertility levels declining in India?"

"India's demographic transition is much ahead of its socio-economic transition."

"India has moved from a fertility rate of 6.1 in 1950s to a Total Fertility Rate of 1.9 in 2021"—**Global Burden of Diseases 2021.**

- **Total Fertility Rates (TFR):** defined as the average number of children born to women during their child-bearing years.
  - **Current TFR of India:** 1.9 in 2021.
- **Replacement Rate:** average number of children a woman should have to replace herself and her generation for population Stability.
  - **Current replacement level of India:** 2.1 in 2021.
- **Demographic Dividend:** large workforce of young people (age 15-64), who don't have to worry about caring for many minor or elderly dependents.

#### Why Fertility Rates are Falling?

- **Changing societal attitudes towards marriage and reproduction with women** increasingly exercising their choice.
  - They often **prefer to marry late or not at all.**
  - Often **choosing career and financial independence** over motherhood.
- **Rising rates of infertility** in both men and women.
- **Abortions** are important factors which could be contributing to this decline in fertility.
- **Migration:** with an increasing number of young men and women opting to go abroad for higher studies and jobs and choosing to settle down and raise their families.

#### Consequences:

- An **ageing population.**
- A **declining young workforce.**
- **Increased demands on healthcare and social security measures for the elderly** — case of Kerala.
- **Rapid Demographic Transitions.**
- **Fertility decline is almost always irreversible and the graph,** once it starts going down, may never bounce back. Despite efforts in countries like **South Korea where TFR plunged from 0.78 in 2022 to 0.73 in 2023.**

#### Demographic Transition in India:

- **After decades of family planning policies** seeking to slow population growth, their success led to an increasingly ageing population.
- **Results of such policies are not uniform**—southern States, as well as smaller northern States have seen a much sharper decrease in TFR.
- **Following data is based on Office of the Registrar General of India 2019 and 2021 report**
  - **TFR 1.4:** Tamil Nadu and West Bengal.
  - **TFR 1.5:** Andhra Pradesh, Telangana, Kerala, Punjab, and Himachal Pradesh.
  - **TFR > 2:** Bihar (3), Uttar Pradesh (2.7), MP (2.6).
- **States with lower TFR** have largely developed faster, but are now facing spectre of a rapidly ageing population.

P.T.O

- **India's elderly population is projected to rise** from 10% in 2021 to 15% by 2036— **India Ageing report published by UNFPA 2023.**
- **Demographic transition** is more advanced in some states:
  - **In Kerala,** senior citizens accounted for 15% of the population in 2021, a figure that is set to rise to 25% by 2036;
  - **In TN and Andhra Pradesh,** elderly will make up 20% of its population in 2036. .
  - **In Bihar,** only 8% were elderly in 2021, and this is projected to rise to just 11% in 2036.

#### Impacts of Demographic Transition:

- **States unable to tap benefits of Demographic dividend due to old age dependency ratio,** leaving an impact on economic growth: Eg. Kerala, Tamil Nadu.
- **Promotion of pro-natalist policies:** Eg. CMs of TN, Andhra Pradesh incentivising women to have more babies.
- **Reduction in women's participation in the labour force,** which will hurt economies of States.
- **Southern States expressing concerns with Finance Commission:** saying they are **being punished** for successful implementation of population policies.
- **Impact on Delimitation of constituencies:** with current status of population States like UP, Bihar, Rajasthan gain more seats in parliament while TN, Kerala, Andhra Pradesh lose. **This weakens the federal structure.**

#### Old age dependency ratio:

- how many older people are there for every 100 people of working age, between 18 to 59 years.
  - **"When this ratio goes above 15%,** that is the **onset of an ageing crisis."**
  - Currently, Kerala (26%), TN (20%), Himachal Pradesh (19%) Andhra Pradesh (18%).
  - The **above States cannot reap the benefits of demographic dividend.** And health expenses are on rise.
  - Southern States, with just one-fifth of India's population, spent 32% of the country's total **out-of-pocket expenditure.** While eight Hindi-belt States with half the country's population, spent just 24%.

#### What are pro-natalist policies:

- Under such policies, **governments try to encourage young couples to have kids by providing incentives** like:
  - Increase maternity leave or paternity leave.
  - Increase child support or reduce taxation.
  - Provide cash incentives for people to have children.
- Since 2015, **countries like Hungary, Poland, Greece, Finland, and Sweden,** where aging is a major issue, have adopted pro-natalist policies.
- **Success of Pro-natalist policies is limited due to:**
  - Rise of cost of living on welcoming child.
  - Need for adequate housing.
  - **What is the cost of raising a child:** like kindergarten and then school?
  - **Big opportunity cost for women:** who are largely responsible for the unpaid care of babies had to drop out of work, either permanently or for a short period.

*In summary, "Educated women know they are not reproductive machines, and forced fertility will not work, nor will incentives that do not recognise what families actually need."*

19 JAN 2025



## INTERNATIONAL RELATIONS

PRE-CONTEXT

### ISRAEL-PALESTINE CONFLICT

THE HINDU, PG.NO: 14.

**News:** "Will the ceasefire in the Gaza Strip hold?"

#### Ancient to Ottoman Period:

- **Historical Claims:**
- Both Jews and Arabs have historical ties to the land known variously as Palestine, Israel, or the Holy Land.
  - **Jews claim:** to trace their heritage to the ancient kingdoms of Israel and Judah:
  - **Palestinian Arabs claim:** they have lived in the region for centuries.
- **Since the early 16th century until the end of World War I, the region was part of the Ottoman Empire**, predominantly inhabited by Arab Muslims with Jewish and Christian minorities.

#### Late 19th century:

- European Jews began advocating for the establishment of a Jewish homeland in Palestine.
- Concurrently, Arab nationalism was rising.

#### British Mandate and Increasing Tensions (1917-1947):

- **Balfour Declaration (1917):** British support for establishing a national home for Jews in Palestine.
- **After World War I and the collapse of the Ottoman Empire**, the **League of Nations granted Britain the mandate** to govern Palestine.
  - Jewish immigration to Palestine increased.
  - Led to tensions with the Arab population and resulted in **Arab Revolts (1936-1939)**.
- **Peel Commission (1937) and White Papers:** proposed plans to partition Palestine or limit Jewish immigration, which were rejected by both Jews and Arabs.

#### United Nations Partition and the Creation of Israel (1947-1948):

- **UN proposal:**
  - Partitioning Palestine into separate Jewish and Arab states, with Jerusalem under international administration.
  - Jewish leaders accepted the plan, while Arab leaders and surrounding Arab states **rejected it**.
- **In 1948, Declaration of the State of Israel:**
  - Following declaration, **neighbouring Arab countries** (Egypt, Jordan, Syria, Lebanon, and Iraq) **invaded**, leading to the first Arab-Israeli war.
  - **Israel emerged victorious**, expanding its territory beyond the UN partition plan.
- **Post-1948 Conflicts and Developments:**
  - **1956 Suez Crisis:** Israel, along with the UK and France, invaded Egypt following Egypt's **nationalization of the Suez Canal**. **International pressure**, particularly from the USA and USSR, forced Israel to withdraw.
  - **Yom Kippur War 1973:** Egypt and Syria launched a coordinated **surprise attack on Israel** during the Jewish holiday of Yom Kippur. This **resulted in the Camp David Accords**.

#### Emergence of Palestinian Nationalism and Organisations:

- **Palestine Liberation Organization (PLO) 1964:** to create an independent State of Palestine and promote Palestinian national interests.
- **Hamas 1987:** an offshoot of the Egyptian Muslim Brotherhood.  
**Ideology:** Combines Palestinian nationalism with Islamic fundamentalism, aiming to establish an Islamic state in historic Palestine.

P.T.O

## Peace efforts and Continuing Conflict

- **Camp David Accords (1978): Israel and Egypt.**
  - **Facilitated by:** USA.
  - **Key provisions:**
    - **Sinai Peninsula:** Israel agreed to withdraw from the Sinai Peninsula, which it had occupied since the 1967 Six-Day War.
    - **Normalisation of Relations:** Established diplomatic and economic relations between the two countries.
- **Madrid Conference (1991):**
  - **Facilitated by:** USA and Soviet Union.
  - **Parties Involved:** Israel, Syria, Lebanon, Jordan, and the Palestinian Liberation Organisation (PLO), etc.
  - **Key provisions:**
    - **Multilateral Negotiations:** Provided a platform for direct negotiations between Israel and its Arab neighbours.
- **Oslo Accords (1993 and 1995): Israel and the Palestine Liberation Organisation (PLO).**
  - **Key provisions:**
    - **Mutual Recognition:** Israel and the PLO recognized each other and agreed to negotiate a **two-state solution**.
    - **Autonomy for Palestinians:** with limited self-governance in parts of the West Bank and Gaza Strip.
- **Wye River Memorandum (1998): Israel and the Palestinian Authority.**
  - **Key Provisions:**
    - **Implementation of Oslo Accords:** Detailed steps for implementing previous agreements, particularly regarding security and Palestinian autonomy.
- **Abraham Accords (2020):**
  - **Parties Involved:** Israel, United Arab Emirates (UAE), Bahrain, Sudan, and Morocco.
  - **Key Provisions:**
    - **Normalization of Relations:** Established diplomatic relations, including exchange of ambassadors and opening of embassies.
    - **Regional Stability:** Aim to enhance cooperation against common threats and promote peace in the Middle East.
  - **Palestinians exclusion from accords:** they felt excluded, seeing accords as a betrayal of the Arab consensus to resolve the Israeli-Palestinian conflict.
- **Ceasefire deal 2025:**
  - Mediated by **Qatar, Egypt and the U.S.**
  - If it holds, it would provide a desperately needed relief for Gaza, the tiny strip along the Mediterranean Sea.
  - **Why Ceasefire now?**
    - Israel now believes its regional standing has become stronger due to:
      - Israel Defence Forces has killed most of the leaders of Hamas.
      - The fall of the **Assad regime in Syria** has further weakened Iran's so-called 'axis of resistance' in West Asia. Mr. Assad's Syria was the land bridge between Iran and Hezbollah.
      - **Hezbollah** is a militant group and political party that emerged in **Lebanon**.
    - Israel carried out a massive air strike in Iran in October, targeting the Islamic Republic's air defences.
    - **Houthis of Yemen** could stop attacking Israel and the ships passing through the Red Sea.

P.T.O



**Core issues persisting today:**

- **Borders and Territories disputes between Israel and a potential Palestinian state:** especially concerning the West Bank and Gaza Strip.
- **Jerusalem:** Both Israelis and Palestinians claim Jerusalem as their capital, with significant religious sites located there.
- **The right of return for Palestinian refugees** displaced since 1948 remains a contentious issue.
- **Israel's security concerns**, including the prevention of terrorism and control over territories, conflict with Palestinian aspirations for sovereignty.
- **Continued expansion of Israeli settlements** in the West Bank is a major obstacle to peace.
- **Israel-Syria Relations:** No formal peace treaty exists. Issues such as the Golan Heights remain contentious.

19 JAN 2025

**DISEASES**

PRE-CONTEXT

**ZIKA VIRUS**

THE HINDU, PG.NO: 13.

**News:** "Development delays in children exposed to Zika in utero."

**Type:**

- **Tropical disease.**
- **Caused by:** Zika Virus transmitted by *Aedes mosquitoes*.
- **Transmission:**
  - *No vaccination or preventive treatment available.*
  - Zika virus infection during pregnancy can cause infants to be born with microcephaly and other congenital malformations.

19 JAN 2025

**ENVIRONMENT**

PRE-CONTEXT

**TOXINS OF BHOPAL DISASTER**

THE HINDU, PG.NO: 14.

**News:** "Can Bhopal waste be safely disposed of?"

**Context:** Forty years after the Bhopal disaster on December 2-3, 1984, Chemical waste weighing 337 tonnes from the factory premises, was transported to Pithampur, an industrial town 35 km from Indore, for disposal at an incineration facility.

**Toxins:**

- **Methylisocyanate (MIC):** doesn't have a particular smell at lower concentrations at which other gases may become noticeable but it *can irritate the eyes*.
- **Arsenic, Chromium, Nickel:** cancers of the urinary bladder and lungs etc.
- **Mercury:** Mercury has been known to damage multiple organs even at low concentrations.
- **Persistent Organic Pollutants(POPs):** refer to organic compounds that don't break down easily, cancer, allergies and hypersensitivity, damage.
- **Method of Disposal chosen: Incineration.**
  - **Incineration:** a waste treatment process that involves burning waste materials at high temperatures in presence of oxygen.
  - **Incineration creates or releases harmful chemicals and pollutants like:**
    - **Air Pollutants:** Particulate Matter, Ash, can cause lung and heart diseases.
    - **Heavy metals:** such as lead and Mercury, can cause neurological diseases.
    - **Toxic chemicals:** Dioxins, per- and polyfluoroalkyl (PFAS) substances, can cause cancers etc.
- **Other types of Thermal processing of waste:**
  - **Pyrolysis:** converts waste into carbon-rich char and hydrocarbon-rich off-gas *without oxygen*.
  - **Gasification:** *Converts waste into syngas* at high temperatures *using air or steam*.

19 JAN 2025

**Thank you!**